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VISIT TO MR. GILES'.

On Saturday evening the 17th instant, we paid a visit to the farm of Mr. A. P. Giles, situated about 2½ miles from Baltimore, on the Harford Turnpike. The dwelling is situate about a quarter of a mile from the road, about equi-distant between the Turnpike and the Harford New Cut road, with carriage-ways leading to either. The mansion is of stone, with a spacious passage running through the centre, and suites of parlors on either side, communicating with each other by folding doors. Including the kitchen, the house comprises thirteen good rooms, which, together with an excellent cellar under the whole, renders it a dwelling of great commodiousness and comfort; and for a stone house, is decidedly the driest one we have ever seen. Mr. Giles accounted for the absence of moisture from its massy walls, which are two feet thick, from the circumstance of its having been burnt down some twelve years since. This, we think, a philosophical reason, as the great heat to which its walls were then exposed, was calculated to expel all moisture from them, and from position, and the exterior covering of rough cast, they have never had an opportunity of re-imbibing it again from the atmosphere.

In a part of the Cellar, Mr. Giles has had a convenient winter dairy room fixed up, which he finds to answer admirably well, maintaining, as it does, that equable temperature so conducive to the secretion of cream and the formation of butter.

The farm comprises 80 acres, and at present there are 47 in culture, divided as follows, 15 in grass, timothy and clover, chiefly; 12 in wheat; 8 in potatoes; 5 in corn; 5 in barley and 2 in oats.

Contiguous to the house, there is a garden, substantially paved in, containing 2 acres; but as it is our duty as a faithful historian to tell the truth, we are compelled to say, that the same attention and skill was not as manifest in its management, as was apparent upon the face of the fields of the farm; for though it is well laid out in beds and walks, but a very small portion of it was occupied with things properly belonging to the business of horticulture. We were sorry to see this state of things, as we do hold it, that a well cultivated garden can be made more profitable than any other part of an estate, and the evidence of careful culture therein, always fills our heart with that delight which revels in feeling, though we may be too poor of language to give utterance to it in words. With the garden, the associations of man are connected from his earliest history; even to that period when our Creator gave that of Paradise to Adam, with the injunction, to till it. Coeval as it is with human institutions, and consecrated by its divine origin, we have ever cherished it as the spot of all others which demanded exertion in its culture, in order that it might speak, through its fruitfulness and verdure, that the heart responded in

gratitude to their Author, for the measure of blessings vouchsafed to our enjoyment. But we are certain, that the neglect of the present spring, does not arise from any cause but that which can be traced to the inauspiciousness of the season; for, up to the middle of April, the earth was locked up with frost and snow, and defied human labor to disembowel its hidden treasures, or place it in a position to woo the smiles of the Goddess who presides over its fruitfulness. Sure are we too, that it did not arise from any want of taste, or inclination, on the part of Mr. Giles; but that it was the result of circumstances over which he had no control. That such is the case we feel assured our readers will admit, when we tell them, that, although he has 47 acres in cultivation, he works but 2 hands and 2 horses, being only one hand and one horse to 23½ acres; that he has been compelled to break up all his ground which is in Corn, Oats, Barley and Potatoes since the middle of April; that since that period he has got all these crops in; and that those of them requiring culture, have been well attended to, is eminently manifest from their appearance, being as fine as fiddles, and as clean as new dimes fresh from the mint. Owing to the long continued snows and rains of spring, it was not until the month of May was on the wane, that he was enabled to put his plough into the ground allotted to corn, and even then, he broke it up against the admonition of his hands, against the voice of the world's wisdom, and against all farmer-rule: for it was still wet, a condition of all others most unpropitious for a stiff clay, and that a tough grass sod. But then, what was he to do? Time was winging its flight in despite of descending rains; and if he waited until it pleased Heaven to send sunshine and drying winds to prepare the earth for the plough, it might be too late to get in his corn, with any prospect of its ripening its fruit. Thus situated, with a worse than Hobson's choice before him, he threw himself upon his good sense, obeyed its promptings, and, as the result has proved, acted discreetly and wisely. He dashed in with his plough, turned in the sod as deep as his team would drive it, and after letting the furrows rest a few days under the influence of the atmosphere, rolled them lengthwise, and then put on a heavy double harrow and scored the clods with its tines whenever there was any prospect of reduction. Such, however, was the condition of the ground, even after all this harrowing, that, instead of being able to lay off the corn furrows with one horse, he had to list with a double team. Under these discouraging circumstances he got in his corn, and, as was to have been expected, the consequence was, that the ground became baked, and it was with the utmost difficulty that the plants even partially found their way through the earth, as they might almost as well have attempted to penetrate solid masses of granite. But again, by one of those bold moves, which often test generalship and win a battle, he came to the relief of nature. Against the fears and advice of his workmen, he put his heavy harrow in, ordering his man to dash on, regardless of the corn that was up, and score it deeply and well. The result of which was, that he opened the earth to the action of the sun and air, pulverized the soil, and gave force and power to the struggling

corn, not only to germinate but to send forth its plants to drink in the vivifying influences of the upper air; and we must do Mr. Giles the justice to say, that though his experiment was a bold one, it has been triumphantly successful; for his field of corn has come up regularly, and if tended as well from now till laid by, as it has been thus far from the period of its up-coming, he will make a crop; as we verily believe that a pint of weeds and grass could not be gathered off of the 5 acres, while the soil itself is in excellent order, and the corn plants looking the very pictures of vigorous and wanton health.

Mr. Giles' 12 acres of wheat, consists of several patches, all of which is good, but the one most decidedly best, is that which was sown the earliest, having been seeded as early as the 7th of last September on a clover-ley. This is, indeed, a most beautiful lot, standing thick on the ground, of uniform and good height, say from 4½ to 5 feet high, healthful and vigorous in appearance, much nearer maturity than either of the others, heavily headed, promising an abundant yield, and not at all injured by winter killing. It is called the *Garden Wheat*; his crop, last year of the same variety, yielded him 35 bushels to the acre, weighing 61½ pounds to the bushel.

The other patches were sown much later, the last on the 28th of October, and appeared to us to have suffered from the frost, in proportion to the lateness of the period at which they were respectively seeded.

Looking at the beautiful condition and fine appearance of the patch seeded on the 7th of September, and comparing it with that sown on the 28th of October, we could come to no other conclusion than this, that *early sowing*, in a climate so precarious as ours—so subject to alternations of freezing and thawing—is desirable, and that it is better to hazard two attacks of the fly, than to run the double risk of being frozen out, and the rust; for while the one is problematical, the others are from the melancholy experience of late years, almost reduced to a certainty. By early sowing the plants have time to become strongly rooted, and thereby enabled to resist heaving out by the frost.

Guano.—While we are speaking of Wheat, we may as well speak of the effect of Guano upon this crop, as proved by Mr. Giles' experiment. He staked off early this spring two pieces of wheat in one of his lots, of some yards in extent each, the one on the outer edge, and the other nearly in the centre. On these spots, he applied small portions of *Guano*, and so marked was the change in appearance, height and general luxuriance, that though the surrounding wheat was good, we discovered the difference even to the very verge of the stalks.

The patch of *Barley* was the more interesting to us because there is so little grown in our state, and from the success of Mr. Giles last year, when he raised *forty bushels* to the acre; we were also gratified to find that the views we have so often used, of the profitableness of the crop, were strengthened by his experiment.

The *Oats* looked well, was thickly set, as oats ought always to be, and promised a good yield.

Mr. Giles' crop of *potatoes*, consisting of 8 acres, had been well put in, was as well manured, and if kept as clean

till land by, as they have been thus far, the season being favorable, must turn out an abundant crop; for verily they bear the most gratifying evidence that the eye of the master has been abroad over the length and breadth of their extended rows. So cleanly is their present condition, that one might as well attempt to find a needle in a hay stack, as to engage to get a weed or blade of grass out of the ground they occupy.

Grass.—Mr. Giles' 15 acres of grass is in several patches. Among them we observed one consisting of several acres of fine timothy, bearing as heavy a burthen of grass on the ground as we have almost ever beheld, and evincing two facts, which are always pleasing to us—first, that he sowed with a *heavy* hand and no grudging heart, and, *secondly*, that his ground has been liberally supplied with nutriment: while the first is evincive of a generous spirit, the second assures us, that judgment and skill was present to back its promptings. But let us not quit the subject of *grass*, before we express our regret at the appearance of that pest, the *Carolina pink*, in several of the pieces of clover. It was truly pleasing to us to observe, however, that, with judicious foresight, Mr. Giles was busily engaged in having his clover cut down thus early, to prevent the maturation of the seed of the *Carolina Pink*, and we were pleased to learn, that it is his intention to plough up all his lots infested with it, as a means of destroying it, and that, as a further means, he intends to subject them to row culture before setting them in grass again.

We have already mentioned that Mr. Giles' *Winter Dairy* is in his cellar, and we will now add, that his *Summer* one occupies a few feet in the rear of his *ice-house*. As economy and utility have been cardinal objects with him, this building is of *cheap* structure, and although admirably adapted both to the preservation of his ice, as well as his milk and butter, it cost him only about \$10, and will last for many years. And who would be without such a luxury and convenience, for so trivial a sum?

Of *stock*, Mr. Giles keeps but few, with the exception of the 2 horses, which we have before named, he has but three cows, a heifer, which will come in next spring, and a calf. The cows, both winter and summer, are kept in the stable, but are turned out into a small grass lot adjoining, twice a week for exercise. They are soil-fed in their stalls through the grass season, and steam-fed there in winter.

The *Cow house* and *stable* is a cheap commodious construction, the flooring so constructed as to convey to two dung pits, all the liquid voidings of the cows and horses, thus adding greatly both to the quality and quantity of his manure. Mr. Giles has already hauled out, the present season, four hundred loads, and has nearly as much more manure preparing for future use. By adopting the soiling system, he has been enabled to accumulate a sufficiency on his farm for all of his purposes, and thus relieved himself from the necessity of purchasing from town. His practice, in this respect, cannot be too much commended, as while it saves him from all outlays in money, it gives him the means of supplying the necessities of his crops, without the toil and expense of hauling.

Although Mr. G. has already sold some twenty tons of hay, we were pleased to find that he had still nearly two entire stacks, of excellent quality, on hand, for the support of his stock, whose fine appearance shewed, that their wants were supplied by a master as distinguished for his providence as he is for liberality.

In a shed adjoining the cow house, all the tools and implements are kept under cover, as every farmer's should be; and from their variety and condition, proved that their owner is sensibly alive to the importance, of not

only being amply provided, but of the propriety of keeping what he has in good order.

In one part of the shed named, Mr. Giles has erected a steam boiler, which is at once simple, effective and cheap. It consists of an iron pot, of 70 gollons' capacity, set up in brick work, with a grate fire place underneath it. Over the pot a block and teakle is fixed, with which he raises a wooden box with holes perforated in the bottom and a cover at top. This is placed over the mouth of the pot, and with these simple fixtures, he cooks all his feed for his cows; corn on the cob is cooked in the pot, while vegetables, roots and the cut provender are steamed in the box above. He can, in 30 minutes, boil the contents of the 70 gallon pot, with a very small quantity of fuel; and he assured us, that, by boiling the corn on the cob, and chopping it up with a spade when cooked, and then mixing it with hay and straw, it formed a cheap, most excellent and nutritious food for his milch cows, making them large contributors to the pail, in milk, rich in all the elements of cream and butter.

Though there are no streams running through the farm, it has a never failing supply of water, derived from four springs as perennial as the seasons, and as limpid and pure as that element is susceptible of being. In addition to which, there is, at the house, a pump of chalybeate, highly charged with iron, and sufficiently so with sulphur, to render its taste perceptible to the palate, and so light withal, as to enable one to inhale it copiously without feeling inconvenience from its volume or ponderosity.

In reflecting upon what we saw, we recollect no suggestion which we have to make, but this. We think that Mr. Giles would add greatly to the beauty and appearance of his excellent little farm, were he to have the woods, as we enter from the turnpike, thinned out, the underwood and shrubs cleared up, and to set it in Kentucky blue grass. Twenty bushels of lime to the acre, together with the expense of seed, the labor of harrowing it in, would then, be all the expense attending it. Once set, it would last for a life time, and afford a rich and unfailing pasture for all his stock, besides enhancing much the intrinsic value of his estate.

In front of the house, there is a small lawn, girded by a semi-circular carriage way. On this, there is a clump of forest and ornamental trees, around which a circular *parterre* of choice hardy roses and other flowers extend, which, without ostentation or show, prove, that in his consort, Mr. Giles is blessed with a lady, whose exquisite taste and chaste refinement, in the outward decoration of the contiguous grounds, is only excelled by those virtues with which she adorns his mansion, and renders it at once the home of cherished love, of systematic order, unaffected hospitality, and of that domestic economy, which recognises frugality as among the duties of a wife. With such a *companion*, and such a *home*, he that could not be contented, would, indeed, excite no sympathy in our bosom; for in the possession of these, a man must be insensible to the priceless enjoyments of life, if he be not *supremely happy*.

For the polite attentions shewn us while enjoying their hospitality, we tender to Mrs. and Mr. Giles the homage of a heart, whose every pulsation throbs in unison with those emotions, which impress the mind with an indelible sense of the kindlier obligations of our nature, and teach it to appreciate the courtesies of the social relations, more by the motive and the manner of their bestowal, than by any standard of value which might be placed upon them.

The bott grub, hitherto so destructive to cabbages, brocoli, and cauliflower, are effectually got rid of by simply soaking the seed in brine previous to sowing.

ACID IN SOILS.

It has become mooted questions of late, whether there be acid in the soil? and if there be, whether lime will so neutralize it as to destroy *sorrel* and other sour vegetables? Some have affirmed, that the doctrine which ascribes vegetable acid or as it is chemically termed, oxalic acid, as the cause of the growth of *sorrel*, is unsound; others that *sorrel* cannot be destroyed by the application of lime. Now, for ourself, from our own experience, we are forced to believe, that there is truth both in the fact of the existence of the acid, and in the competency of lime, as a neutralizer, to remove it. Our reason for this opinion is a plain one and soon told. We had some years ago a lot of about two acres of sandy land, resting upon a clay bottom, so infested with *sorrel* as to destroy two successive crops of clover. The land had never been limed, and believing that the presence of the *sorrel* was owing to a superabundant supply of acid in the soil, we determined to try the effect in neutralizing it, and it so turned out that we had some *freshly burned, unslacked oyster shell lime* on hand, two hundred bushels of which we spread over the two acres of ground, on the top of the lay of *sorrel*, for it was then several inches high, ploughed both the lime and the *sorrel* in, on the 20th of July, and on the 15th of August following, we gave the ground another ploughing returning the lime to the surface, which had become tolerably well slacked. We let the lot remain until the following spring, when we sowed it in oats and clover, and was never again troubled with our old enemy the *sorrel*. As there has been considerable discussion of late upon this subject and no little diversity of opinion upon this matter, we have thought that it might be interesting to our readers to know the views entertained by that eminent chemist, Professor Dana, of Lowell, Massachusetts, whose admirable work upon Agriculture, shows that his opinion is entitled to profound consideration. It has been alleged in support of the position, that lime will not destroy *sorrel*, that in many instances, where lime had been applied to the soil, that the *sorrel* had continued to grow, and even that in some instances had grown through coatings of marl, which is mainly the carbonate of lime, or, to speak more plainly, lime in a slacked state. This, we think, is very plainly and satisfactorily accounted for by Professor Dana. His views are, that the lime should be ploughed in, in an unslacked state, and not be left on the surface to become slacked by the elements; that the vegetable acid of the soil reaches much deeper than the minute portions of the lime which is dissolved by rain can penetrate, that if the slacking takes place by air alone, that, as carbonate of lime is insoluble, none of its active neutralizing principles can enter the soil, and, therefore, cannot effect the *sorrel*, unless, perhaps, by preparing it, through the vegetable matter which it may have caused to decompose, additional food, by which its capacity for sustaining life is increased rather than diminished. This is our reading of the Dr's communication, and as his *theory* corresponds with our own *practice*, we feel justified in commending his views to public notice.

From the New England Farmer.

OXALIC ACID—SORREL.—REPLY TO "D."

Dear Sir—I commonly receive your paper the morning after its publication. "No. 47, (May 24th,) came to me twentyfour hours in advance. I was sure it was not my regular number, for on opening it, I found the hand of the person who sent it, pointing to the communication of "D." on the 1st page. Though I do not feel myself called upon to reply to the request of "D." because thus publicly made, I shall be happy, if in this instance I can throw any light upon the subject to which his paper refers, by laying before him such thoughts as have occurred to me on reading his remarks.

Mr. Darling has stated in his extract from Dr. Kane, and in his own remarks, (see N. E. Far. May 17.) the well known, long received, and established chemistry of the organic acids of plants, and their transformations. To recall

this to mind, I would state the main facts, as chemists understand them, relating to oxalic acid:

1st. Plants form oxalic acid. Almost every, perhaps all, plants contain this acid. The soil seldom contains traces of oxalic acid. Whenever it is there found, it has proceeded from organic decomposition; decaying plants. That plants form this acid, is evident from the fact that some *lichens* grown on naked granitic rocks, contain from 20 to 66 per cent. of oxalate of lime.

2d. Oxalic acid does not exist in plants free. It is always combined with a base—generally with lime or potash. In sorrel, (including in this both wood and common sheep's sorrel—*oxalis* and *rumex*)—the oxalic acid exists as super oxalate of potash. Each portion of potash is combined with four portions of acid. The salt of sorrel is the salt of lemons of the shops.

3d. These basis, lime and potash, are essential to the formation of oxalic acid by plants. The plants never form bases. They are derived from the soil or air. Hence, before the oxalate-forming plant, *sorrel*, can grow, the bases to saturate its acid as it is formed, must freely exist in soil.

4th. Oxalic acid is composed of—carbon, two parts; oxygen, three parts. We cannot, plants probably do not, form oxalic acid by the direct union of its element. We can, and do for the arts, transform starch and sugar, by the aid of aquafortis, into oxalic acid. So, plants, wonderfully more exquisite in their elaboratory, transform sugar, starch and gum into oxalic acid. If we, in our imitation of nature, require the strongest acid, her delicate hand may effect a similar transformation by the aid of such weak acids as vinegar, and the organic acids found in muck and soil. There is some reason for this belief, when we call to mind the fact, that without any fermentation, sugar is easily transformed by weak vinegar into vinegar. This is a well known process. I go farther; plants transform these weak acids into oxalic acid. This is the great source of that acid. We have only to deprive, as does the plant, vinegar of its hydrogen, and double its oxygen, to convert it into oxalic acid. This is done by the oxalate-forming plant, simply by the aid of oxygen only, as we in our process of art, change alcohol to vinegar by a current of air and the aid of a ferment. Life is this ferment in the plant. Oxygen in either case effects all the other change.

To apply these principles to the remarks of "D." It has been shown that lime and potash are essential to the existence of oxalate forming plants, as sorrel; that weak organic acids are easily transformed into oxalic acid. When, therefore, such acids dissolve, and supply easily the lime and potash to the plant, the acids being in excess, (for we have seen that the salt of sorrel is a super salt,) these oxalates will be formed. In other words, sorrel grows best where free acids and small portions of alkali exist. By applying sour muck, filled with weak organic acids and their bases, to soil, we supply it with the food of sorrel. Lime, or potash only is not this food. Dissolve these bases by weak organic acids, form super-salts of them and you may expect to find, yea, you do find, oxalates produced, sorrel growing.

But it is said that the common chemical doctrine of the agricultural press is wrong. What is that doctrine? *Neutralize the free acids—take the sour out of the soil*, and sorrel grows not. The doctrine is *neutralize*. All hangs on that word. If you only *partially* neutralize, you supply the sorrel with its natural food—an acid salt.—You feed it, both with its acid in excess, to be converted into oxygen, and the base with which that acid is to combine. You give the sorrel, in the same spoon, both its solid and liquid food:—these acid salts are the hasty-pudding of plants.

But it is possible that "a coat of lime two inches thick," does not neutralize the acids? Yea. Your coat of lime is here on the surface. It has been slacked there. During that process, if by air only, it has become an insoluble carbonate: it has not entered the soil. If slacked by water, then a small portion has entered the soil as lime water. This portion has not neutralized the small portion of organic acid in the soil. I go farther: its excess has caused the inert vegetable matter to become acid to a greater degree than the lime can saturate. It has formed with it an acid salt. In this salt, sorrel finds food. It pushes up through your two inches of coating. That insoluble carbonate does not affect its growth any more than sand. The small portion of lime added to not upon, the soil, having furnished the food for which the sorrel famished, that now springs up, rejoicing that the lime has caused the different vegetable matter to become acid, and to act upon

the potash of the soil. Perhaps in these cases, lime is substituted for potash,—an isomorphous substitution.

Lay down your spent ashes, Mr. Editor, in a heap. You know its alkaline power is developed slowly by the action of air upon its silicates of potash. Cart it off now, to top dress your reclaimed meadow. You have left, where your pile was, the very material to partly saturate the organic acids of the soil—perhaps even increased them. You have formed acid salts, by whose absorption oxalate-forming plants, sorrel, will be produced. That this effect may follow an under dose of alkalis, may be understood from what has been advanced. If *all* the acid is fully neutralized, then the transformation of the neutral salt is probably not effected:—sorrel grows not. If, on the other hand, you supply the weak organic acids freely, as by sour muck, these, finding in all soils a small portion of lime and potash, the super-salts are formed, and sorrel grows. It will grow till the acids are exhausted.

I consider, then, Mr. Editor, that the common opinion is well founded. I have great reverence for common opinion on such subjects. It is generally based on observation. In this case, it is supported by chemical philosophy. The doctrine of the agricultural press appears, in the present state of our knowledge, to be the true one. *Neutralize the free acids*—but do this by *soluble* alkalis in the soil, not on it.

To the last inquiry of "D." I reply, there is no better test of the presence of acid in the soil, than the growth of sorrel or oxalate-forming plants. It is often a better test than the chemist can apply. Unfortunately it is an analysis always ready for the task. Like his brother analysis, he points out the existence of evil, but leaves to others the task of remedy, which the study of his habits teaches.

With great regard, your obt^d serv^t,

Lowell, June 2d, 1843.

SAM'L L. DANA.

BLIGHT IN APPLE TREES.—The following letter from Professor Harris of Harvard University, Massachusetts, is upon a subject of deep interest to every farmer, and as Dr. H. is one of the best entomologists in the country his views are of the more value.

From the Massachusetts Ploughman.

BLIGHT-BEETLE.

Cambridge, June 1st, 1843.

Wm. Buckminster, Esq.—Dear Sir: The insects contained in the branch of the apple-tree, which you submitted to my examination, are the same as those which produce the sudden withering of the leaves and the death of the limbs of the pear-tree, an affection commonly called fire-blight. The discovery of the blight-beetle in the limbs of the apple-tree is a new fact in natural history, but it is easily accounted for, because this tree belongs not only to the same natural group, but also to the same genus as the pear-tree: it is not, therefore, surprising that both the pear and the apple-tree should, occasionally, be attacked by the same insects.

The piece of the apple-tree branch, now before me, measures twenty-eight inches in length, and is three quarters of an inch in diameter at the lower end. Its surface bore the marks of twenty buds, thirteen of which were perforated with by the insects above-named; and, from the burrows, I took twelve of the blight-beetles in a living state, the thirteenth having previously been cut out. This goes far towards confirming my remarks on these insects, published in the fifth volume of the "New England Farmer," page 171, where you will find the following statement. "A whole limb may swarm with them; every bud may conceal the place of their operations, without exciting a suspicion of their presence." For their history I might have referred you to the various published communications of Mr. Lowell, and Professor Peck, who have described the agency of these insects in producing the "disease in pear-trees," or, to my own remarks on the same subject, in the "N. E. Farmer," and in the "Treatise on Insects injurious to Vegetation," a book that has been more praised than read; but experience has taught me that line upon line and precept upon precept are needed to keep the attention of the public directed to the depredations of insects. Allow me therefore to extract, for you, the following passages from the last named work.

"The grub or larva of the insect eats its way inward through the alburnum or sap-wood into the hardest part of the wood, beginning at the root of a bud, behind which probably the egg was deposited, following the course of the eye of the bud towards the pith, around which it

passes, and part of which it also consumes; thus forming, after penetrating through the alburnum, a circular burrow or passage in the heart-wood, contiguous to the pith which it surrounds. By this means the central vessels, or those which convey the ascending sap, are divided, and the circulation is cut off. This takes place when the increasing heat of the atmosphere, producing a greater transpiration from the leaves, renders a large and continued flow of sap necessary to supply the evaporation. For the want of this, or from some other unexplained cause, the whole of the limb above the seat of the insect's operations suddenly withers, and perishes during the intense heat of midsummer. The larva is changed to a pupa, and subsequently to a little beetle, in the bottom of its burrow, makes its escape from the tree in the latter part of June, or beginning of July, and probably deposits its eggs before August has passed. This little beetle is only one-tenth of an inch in length; it is of a deep brown color, with the antenna and legs rather paler, or of the color of iron-rust. The thorax is short, very convex, rounded and rough before; the wing covers are minutely punctured in rows, and slope off very suddenly and obliquely behind; the shanks are widened and flattened towards the end, beset with a few little teeth externally, and end with a short hook; and the joints of the feet are slender and entire."

"The minuteness of the insect, the difficulty attending the discovery of the precise seat of its operations before it has left the tree, and the small size of the aperture through which it makes its escape from the limb, are probably the reasons why it has eluded the researches of those persons who disbelieve in its existence as the cause of the blasting of the limbs of the pear-tree. It is to be sought for at or near the lowest part of the diseased limbs, and in the immediate vicinity of the buds situated about that part."

"The remedy, suggested by Mr. Lowell and Professor Peck, to prevent other limbs and trees from being subsequently attacked in the same way, consists in cutting off the blasted limb *below* the seat of injury, and *burning it before the perfect insect has made its escape*. It will therefore be necessary, carefully to examine our pear-trees daily, during the month of June, and watch for the first indication of disease, or the remedy may be applied too late to prevent the dispersion of the insects among other trees."

We are now to look for the disease and its cause in the apple as well as in the pear-tree, and should not delay to cut off and burn the infected limbs, as soon as the leaves begin to wither.

Yours respectfully,

T. W. HARRIS.

¶ We are under much obligation to Dr. Harris for the above communication. We are much inclined to believe that all the diseases of trees are the gnawings of grubs and insects concealed in many cases from common observation. We must hunt up these enemies and exterminate them as fast as they are found. [Editor.]

SMUTTER AND CLEANSER.—The proprietors of the grist-mill in this village have just put in one of Grimes' Smut Machines.

It is one of the *slickest* and most efficient yankee inventions that we have ever seen for a long time. We saw some very smutty and foul wheat brought there the other day to be ground. It was so full of smut that by rubbing a little in your hands they would be smutted all over with the dust. It was put into the hopper and passed into the machine. On going up to the room where the machine is, we found the smut dust had filled the whole apartment like a dense black smoke, and the wheat, on coming through, was perfectly clean. We could not find a particle of smut in, on, or about it. The flour made from it looked as white and as nice as any other. It is a capital affair, made wholly of iron, and is both neat and durable. —*Maine Farmer*.

HIGH PRICE FOR TOBACCO.—A hoghead of Tobacco, of the crop of our esteemed fellow citizen, John M. Warwick, Esq., was sold at Martin's warehouse, on Tuesday last, by John H. Tyree, for the pretty sum of *twenty-five dollars and twenty five cents* per hundred, the highest price obtained this season in the Lynchburg market, or it may be safely asserted in any other market in the United States. The article was extremely fine, and was purchased by Messrs. Langhorne & Armistead, manufacturers. —*Lynchburg Paper*.

THE AMERICAN FARMER.

PUBLISHED BY SAMUEL SANDS.

Correction.—In Dr. Muse's communication published on the 7th instant, the word "favorable" in the 10th line should have been "unfavorable."

A Cow worth having.—We learn from the *Wheeling Times*, that Mr. Sprigg, of that city, has a cow which gave 55 gallons of milk in 6 days, being equal to 9½ gallons, or 36¾ quarts, per day. As such cows are rare in any country, we should be pleased, if it would not give the editor of the *Times* too much trouble, if he would furnish us with her age, pedigree and any other circumstance connected with her history, and particularly of the quantity of butter she yields per week, or in any other given time.

It is worthy of note, that the 55 gallons, or 220 quarts of milk, given by the above cow in the six days, would be worth in this market, at 6½ cents per quart, \$13.75.

Death of Llewellyn.—We regret to learn that Mr. Henry Mankin's fine imported improved short horn Durham bull Llewellyn died a few days since of Hydrophobia. He was among the best of the bulls imported into Philadelphia by the Messrs. Whitaker a few years since, and was a most noble specimen of his generous race.

AYRSHIRE CATTLE.—We copy in to-day's sheet an interesting article, from the transactions of the New York State Society, on the subject of *Ayrshire Cattle*. It is by George Randall, Esquire, of New Bedford, Massachusetts, and as he speaks from his own personal experience, his remarks on the merits of this excellent dairy breed are the more valuable.

From the Transactions of the New York State Agricultural Society.
AYRSHIRE CATTLE.

By George Randall, New-Bedford, Massachusetts.

I will now attempt to give you some account of my importation of Ayrshires; but allow me first to state, that I have no pretensions as a good judge of stock, or of science as a breeder. I have imported from Scotland two bulls, not near connected by blood, to avoid that miserable practice of in-and-in breeding; also four cows and one young quey. Three of the cows were in calf when imported. One had a calf prematurely, and died from inflammation on the lungs. One cow died from eating a very small quantity of paint, and she left me a heifer calf six weeks old, by my bull Rob Roy. My stock was all bred by Mr. Lawrence Drew of Carmyle, near Glasgow. He has been a very successful breeder, and has taken very many premiums. My best bull, Rob Roy, was six years old in May last; he was out of a cow called Daisy. In June, 1838, Daisy took the eighth first premium at the County Shows of Scotland, and in September, 1838, she took the first premium of twenty guineas, at the Highland Society's Show at Glasgow, (open to the United Kingdom,) and became outlawed, viz: she could not be shown again for a premium.

Rob Roy had the first premium awarded him at the show of four counties, at Baileston, (Scotland,) in June, 1838, as the best bull in the two years old class. In 1840 he had the first premium awarded him at the Show of the Windham and Norwich Co's. Society at Norwich, Connecticut; and in 1841, the Massachusetts Agricultural Society gave him the first premium at Bridgewater. This society gave premiums on blood stock only.

This bull Rob Roy, is, strictly speaking, a dairy bull, and very high bred; perfectly quiet; never had a ring in his nose, and a child four years old can drive him, and do anything with him. He is much inclined to take on flesh; has been wintered on barley straw and one and a half peck of ruta bagas per day; did not have one particle of hay, and come out in the spring looking like a stall fed animal. He has not had a particle of grain or meal since he came to the United States, excepting two days when on the road to Connecticut, when he had some oats. In a word, I will say, give him as much good English hay as he will eat, and he will be too full fed.

My cow Swinley was seven years old in May last; was

in calf when I imported her in 1838, by a high bred bull that took the first premium at Baileston, in June, 1839. The premium was a massive silver medallion elegantly wrought and seven sovereigns. The calf from Swinley was a quey, dropped March 30th, 1840. I call her Maggy. She is very much like her mother, and bids fair to rival her as a milker. She gave me a heifer calf on the 3d of April last, by my second imported bull Roscoe, and for more than two months she gave twelve quarts of milk per day.

Swinley is a small cow, low in the leg, fine in all her points, high bred, and is what I should call a large cow in a small compass, and if well fattened, would probably weigh from seven fifty to eight hundred pounds. Her last calf was a quey, by Roscoe, dropped on the 23d of April. The greatest quantity of milk per day was in June, and 25 quarts, (when I speak of quarts I wish to be understood the old fashion milk or beer measure;) and the largest quantity of butter per week has been fourteen pounds. Swinley is a high bred cow, out of a cow called Rachel, who, when five years old, had taken five first premiums at the county shows.

My last imported cow, Crummie, was shipped from Glasgow, via Liverpool, in April, 1841. She was in calf by a thorough bred bull owned by Mr. Drew. He speaks of the bull as the best he ever owned, or expects to own. Crummie was five years old at the time she was shipped, in April, 1841. She dropped her calf the first of March, '41, and when shipped was giving 24 quarts of milk per day. She was hurt across her back on the voyage, and did not get over it up to the time she gave me a bull calf, on the 7th of February last. She got up to 22 quarts of milk per day, but did not exceed that quantity at any time after calving. If she continues to do well, I shall expect her to give 26 quarts per day, next season. I have two young Ayrshire heifers, bred by Mr. Cushing of Watertown, Mass., from stock he imported. Each gave me a heifer calf, one in June, the other in July last, one by my bull Rob Roy, the other by Roscoe. I have four heifer calves this year, all full blooded, and of much promise. I do not allow a calf to suck the mother, not even to know what a teat is. We take them off and bring them up by hand, giving them new milk for a fortnight; after that we give them skimmed milk, with a small quantity of Indian or oatmeal in the same.

As to my success in breeding, I think I may say I have been successful, although on a small scale. I shall have seven full blooded Ayrshires to come in next year; have four blooded heifer calves, two bulls and one bull calf, which is all the full blooded stock I have.

In my opinion the Ayrshires are better adapted to the short pasture and fickle climate of New-England, than any breed of cattle with which I am acquainted. They are not great consumers of food, and I think give a greater return in butter and milk for the food they consume than other breeds. I have several very good native cows; and in winter the natives and Ayrshires are standing together, and are fed alike, as to quantity of roots, all having what they require, but there is a very marked difference in their appearance in the spring, and in favor of Ayrshires. From their disposition to take on flesh, I should think them a superior stock to breed from for the shambles. But I think where a long bite is always to be found, and other provender in abundance, nothing will ever rival the Improved Short Horns for early maturity and quantity of beef.

The Crops.—It has been ascertained that the gloomy anticipations, in regard to the growing crops, indulged in by our farmers, in the early part of the season, are likely to be fully realized. The ravages of the fly upon the wheat, has been very great and very general—but, unfortunately, what was left has been subjected to another enemy—the smut, which, we are told, prevails to an extraordinary extent. We were shown, a few days since, several heads filled with this substance, gathered near Boonsboro; and we were told that it was impossible to collect a handful of heads, without finding a large portion of it to consist of this article. The Rye is much more promising than the wheat.—*Hagerstown Torch.*

The Tobacco Crop.—Our planters are becoming alarmed at the prospect for a crop of tobacco this year. We know speculators will say it is feigned, designed to effect the price of the article now, or about to be, carried to market—but were they to see the plants as they stand in the beds, and witness the daily decrease, they would be convinced that unless we have rain in a few days, very little tobacco can be planted in time to mature. Some beds

are already literally burning up. There is at this time (Wednesday) some appearance of rain.

The season has been unusually backward in every thing. We see by the Virginia papers that they entertain no hope of making a full crop of tobacco in that State.—*Upper Marlboro' Gaz.*

§ The wheat in the Valley is said to be wretched—so, also, in Culpeper, and that region—the same in Louisa, (with the exception of the Green Spring neighborhood, where there are fine crops.) Near this city, the harvest has partially commenced, with fine prospects. On the large estates on lower James river, they will this week begin to "gather in." We will make no prediction of the crop of the State. Nothing is more uncertain. Last year, all the calculations, even of the wisest heads, were completely at fault.—*Richmond En.*

The *Terre-Haute* (Indiana) *Courier* of the 17th says—The wheat crops around us may almost be considered a total failure. Oats scarcely ever looked more promising. Corn, unless the wet weather gives too much encouragement to the grass, may yet do well.

The Crops in Virginia and North Carolina.—The season has been backward by some three or four weeks for Corn and horticultural products, it having been unusually wet and cold—but so far as the wheat crop is concerned there has not been so propitious a one for years, nor one likely to yield the husbandman a more abundant return for his toil.

On the James River, one of the largest wheat growing sections of Virginia, the May wheat (as it is called) has been or is now being safely harvested on most of the large estates, and the late wheat is generally safe from risks, except those from storms and hail.

The question as to the best and most judicious cultivation of the soil is attracting greater attention among our agriculturists, and there is a disposition to cultivate less land, and that highly improved, in preference to the old system of immense fields. Much more interest is felt in agricultural exhibitions with their addresses and prizes, and a better day appears to be dawning upon our agricultural prospects.

The failure of crops last year, in the eastern section of North Carolina, has been felt as a serious calamity, the country which usually exported largely having to import large quantities of corn for necessary home consumption. The corn and oats though backward, have taken a start under the late favorable weather and are likely to yield an average crop. Upon the whole the farmer has as yet no cause for despondency.—*Norfolk Beacon.*

POTATOES.—It is 272 years since potatoes were first known in Europe. They were introduced into Ireland, during the reign of Queen Elizabeth in 1565, by Captain John Hawkins, who brought them from Santa Fe, in South America. It is said that they were first planted by Sir Walter Raleigh, who had an estate in Ireland; but the natural history of the potato was so little understood at that time, that Sir Walter resolved to renounce the expectation he had formed, of bringing this exotic to perfection in that country. When in due time, after he had planted the first potatoes, the stalks grew up, and he perceived upon the stem a green apple, he thought that was the fruit, which he had no idea of being concealed under the earth. He caused some of these apples to be boiled; but finding them nauseous to the taste, he concluded that he had lost his labor; and for some time thought no more of potatoes. However having some time after given directions that the ground should be dug up, or ploughed, to his very great surprise he found a plentiful crop of fruit, which proved most grateful to the taste. They soon got into general use, and became the principal food of the Irish peasantry.

§ CURIOUS POTATO.—We understand that Gen. Tallmadge of this City—well known for his intelligent advocacy of every thing calculated to advance Agriculture or general Industry, has with considerable difficulty obtained some specimens of a very curious Potatoe which it is believed may be introduced into this country with eminent profit and advantage. The few he has been enabled to procure were raised in Charleston, S. C. from seed recently brought from S. America. This potato is not a radical or bulb—but is borne above ground, upon a vine which should be trained on a trellis. The one from which these were gathered covered the end of a piazza and reached the height of 15 feet. The vine is said to be very beautiful, bearing a heart-shaped leaf; and the potatoes it bears are of a very excellent quality.—*N. Y. Tribune.*

WORK FOR JULY.

As several days of July will have elapsed before the appearance of our next sheet, we shall anticipate the two remaining ones of June, to commune with our readers about the labors and duties to be performed next month. In so doing, while we remind them that the harvest month is always a busy one, we must be permitted to add, that it should be the duty of all, who may be engaged in the culture of the earth, *never to suffer themselves to be hurried*; as work performed under such an influence, is seldom done well, and never with that state of composure, which render the toils of life, however arduous, sources of pleasure. By exerting a little care in looking ahead, and arranging, in anticipation, for the work to be done—by being strict in having every thing done at the right time, and in the proper way, and by giving personal attention to every operation as it may be going on, a proprietor or employer may save himself from those countless vexations and disappointments, which not only lessen the chances of success, but give birth to confusion, where order should abound, and throw into one week the work properly belonging to many preceding ones. To avoid this, should be a first consideration with every one, and may be easily accomplished, by having the work of each succeeding week laid down in a journal, in *advance*, and executed in detail, as the time for the performance of each kind may arrive.

In commending this systematic arrangement, in the disposition of the farm, or plantation work, it may be well to carry our advice somewhat farther. It matters but little how well we may manage in the growth of our crops, if we do not act out with the same principle and care, after they may have been harvested. How this may be done, we will tell in a few words. It is, by pursuing a wise system of *enlarged economy*, procuring whatever may be essential to the comforts and conveniences of our families and dependants, taking care of whatever we may make, indulging in no extravagant expenditures, and living within our means. But while we are thus regulating our family and incidental expenses, let us not forget, that the *mind* as well as the *person* requires nutriment.

With respect to the crop of *Wheat*, the *money crop* with so many, we are not in possession of sufficient data to enable us to speak with certainty, but after comparing the facts before us, and taking into the account the prospects of injury from the fly and rust; we are prepared to advance the opinion, that the present wheat crop will not be more than three-fourths of an average *good* one. Let us be understood. We are aware, that, in the West, much more wheat was seeded last fall than in former ones; but we are also aware, that much of this was greatly injured by winter killing. The same cause of impairment, too, operated also in Maryland, Virginia, North Carolina, and others of the Atlantic wheat growing states. In addition to the mischief they produced, that old enemy bequeathed us by our revolutionary enemies, the *Hessians*, has been at work and done his full measure of injury; and making but a moderate allowance for the ravages of the Rust, we think the conclusion a very rational one, that fully one-fourth of the growing crop of wheat will have been taken off by the causes assigned.

But while we say this, we are far from indulging in any feelings of despondency, as we believe that three-fourths of a crop, the present year, will nett the farmers more money than a full one did last year, and especially those on the Atlantic seaboard, or those who find their markets there. Much of the Wheat raised in the West, owing to the regulations between England and her North American possessions, will find markets in the Canadas, and thence be shipped to England, either in grain, or flour; for although the policy of England prohibits the introduction of *Flour* at the *low* rates of duties into her colonial possessions, the grain may be carried thither and there converted into flour, and still be only subjected to the minimum duty, it being the policy of England, to give employment to her population, and promote her shipping interests, and hence her discrimination between the grain and the flour made from it. From the causes assigned, a very large portion of the Western wheat will be diverted from the seaboard, and hence but, *comparatively*, a small portion of it will find its way to the Atlantic markets, and, consequently, that grown in the seaboard states, will experience much less

competition from that quarter in the supply of our markets, both for home consumption and exportation. Again, should the present apprehended difficulties between England and Ireland, result in an outbreak, and war ensue, however short its continuance may be, the supplies from the West, through the Canadas, for the English markets, will be greatly enhanced in quantities, and it may turn out, that the Atlantic wheatgrowers may have the almost entire possession of the markets in their respective neighborhoods. Should what we have suggested occur, there can be no question, that breadstuffs of all descriptions will increase in value, for *price* always has, and always will, bear a relative proportion to the quantity of an article in the market. Without troubling the mind with a disquisition upon the *philosophy* of the thing, it may be safe to assert, that *scarcity* ever did and ever will *increase* price.

On the eve of the coming harvest, we have felt it to be our duty to throw these our convictions before our agricultural brethren, in order that, if they be worth any thing, they may profit by our timely suggestions: if they be worth nothing—if founded on erroneous grounds—their utterance can do no harm, because we give our reasons as well as our opinion, and every reader will be able to judge for himself—Our *motives* are a sufficient *guaranty* to us, so far as we are alone concerned—they are these,—we believe that the growers of an article are entitled to their full share of the profits to be realized, and so believing, we considered it to be our duty to place them in a position to husband and protect their interests.

Having thus far indulged in a pretty free conversation upon the subject of prices, upon what your crops may be probably worth when grown, let us drop that theme, and chat awhile upon matters more immediately connected with your present duties

ON THE FARM.

Harvesting—As the time is nearly at hand, when you will be called upon to exert your energies to secure your crops of wheat and rye, permit us to urge it upon you as an imperious duty, to forthwith inspect all your harvest implements, and have them put in the best possible condition, in order that they may be ready when wanted. Procure all your harvest supplies, and be sure in the employment of your force, to engage enough both to *cut* and *secure* your grain in good time. Be careful too, not to let your grain get dead ripe, but cut it at the proper time. It has been proved by experience, the best of teachers, that it is better even to cut before the grain is *quite* ripe, than to delay it beyond the period of *actual* maturity, as there is always juices enough in the straw to carry on the ripening process even after it is down. Besides straw, thus cut, is always worth more as provender than that which is permitted to remain in the field until perfectly dry; but there is another reason to induce early cutting, the *exhaustion of the soil* is thereby arrested.

As the use of ardent spirits in the harvest field has been very generally abolished, permit us to suggest to you, as we did last year, the substitution of the following excellent

Harvest drink—Mix 5 gallons of cold water, $\frac{1}{2}$ gallon of molasses, and 2 oz. ground ginger together, and give this to your hands. It is safer than cold water alone, is refreshing to the system, and as grateful to the palate.

A word or two more. If you have a good manager, so much the better, as in him you have a *good* assistant; but whether you have a *good*, an *indifferent*, or a *bad* one, let us advise you, to *oversee* yourself all the operations of your harvest field, from the cutting of the grain to its being stacked away: see that it is cut at the *proper* time, that it is *cut* properly, that it is properly put into the sheaves, that it be not *improperly* or for too long a time, exposed to the weather; that it be carefully carted or wagoned away when sufficiently dry, and that it be so stacked, as to protect it from the weather.

Your grain thus secured, avail yourself of the earliest period at your command, to *commence* the work of *threshing* out, in order that you may be ready to take advantage of the rise of the markets. But before you put your threshed grain into your granary, have that thoroughly cleansed. The way to do this, is to brush the floor and walls well, and after you have got out all the dirt and cob-webs, wash the floor, *walls* and *ceiling* with strong ley, and when dry, whitewash the two latter. Attention to this duty, may save you

from the visitation of the weevil, and consequently from much trouble and loss.

Hay—As soon as your grasses are in bloom, begin to mow them, and in curing your hay, expose it as little as possible to the influence of the weather. After half a day's sunning in the *swath*, it should be put into *cocks*, and cured in that way. As soon as *dry* remove and stack it, not forgetting to sprinkle a peck of salt on every ton of it as you put it away.

Corn—As this is the American grain crop, pay all possible attention to it, and take our advice, and work it with cultivators and hoes after the first, or second ploughing at farthest, as every laceration of the roots abstracts that food from the ears, which is essential to the formation of the grain. If the cultivators be put to work, at short intervals, and run close to the plants, there will be little left to be done by the hoe men; but don't trust to your hands; examine every working yourself, you may rest assured that as "eternal vigilance is the price of liberty," so also is it that of a corn-grower's success.

Millet—If you apprehend a scant supply of provender for your stock, you have a most admirable chance of making up your deficiency, in *Millet*. It makes an excellent hay, is of quick growth, and may be grown in seven or eight weeks; we have cut it in 60 days from the time of sowing. The ground best adapted to it, is a *rich loam*, and it delights in a warm sun—The ground must be thoroughly pulverized, and well manured: and of this you may be certain, that every acre you may put in, in such ground, you will receive three tons of hay, and 15 or 20 bushels of seed. The hay, with the seed on, will support work horses without other grain. Sow $\frac{1}{2}$ bushel seed to the acre any time before the 15th.

Buckwheat—Now is the time to get in this crop—don't delay it beyond the 10th or 12th of the month. It will yield you 20 bushels of grain per acre, besides giving you half a ton of good hay for your milch cows, provided you cure and stack it properly, taking care to salt it as you put it away. When we speak of the straw, if you please to call it so, making *good* hay for milch cows, we speak from our own experience, and we have no hesitation in affirming, that it is as promotive of milk, as any other hay, clover, perhaps, excepted. And we have as little in saying, that the grain makes as good chop for horses, cows or hogs, as does rye—and as for the cakes made from its *meal*, when swimming in the sweet luscious butter of the good housewife, we will not mention them, for fear of mischief, as it is a long time from now till winter, the harvest home of buckwheat cakes, sausages and spare-ribs.

Potatoes—Though it is very late for this root, we have seen a tolerable product from a planting on the 6th of July, and we mention the fact in order, that if there should be any one who may not have planted, that he may yet get in a small patch. But let whoever may try it, he must manure well, and keep them moving by constant working from the time they come up until they are laid by.

Turnips—He who wishes to succeed with a good crop of turnips, should forthwith plough up his ground, as deep as his team will drive the irons; then, just before the time for sowing, haul on his manure, (cow dung best) and plough it in a few inches, then harrow his ground until perfectly fine, then sow his seed, harrow it in lightly, and finish by rolling. It would be better before rolling, to sow either ashes or lime on the ground, about 25 bushels to the acre. When the plants first come up, sow fresh slacked lime over them, three or four mornings in succession, while the dew is on, or sprinkle fish oil over them with a mop, either, if properly done, will protect them from the fly.

When the leaves of the plants are of the size of a dollar, run a harrow through them, and when they begin to *bottle*, repeat it; after which, thin them out with a hoe, so as to stand about 6 or 8 inches apart. In a week from that, give them another hoeing, and you may conclude you have finished their cultivation. **Orchards**—Turn your pigs into your orchards, if not in culture, to eat up the falling fruit. If you can't do this, have it picked up, and fed to your hogs. Cankered limbs must now be cut off, into the sound wood, and the wounds covered with a mixture of 2 parts clay, 2 parts fresh cow dung and 1 part salt, to be brought to the consistency of thick paste with chamber-ley, the whole to be thoroughly mixed together. The trees also would be the better of being

washed with the ley of wood ashes, or by having their bodies painted with soft soap. The roots of the Peach tree should be examined and all worms found therein destroyed with the point of a knife, or a piece of wire, then paint them with a mixture of three parts soft soap, one of sulphur, and one of salt, replace the earth and sprinkle thereon a mixture of salt and saltpetre, seven parts of the former to one of the latter, in the proportion of a pint to a tree, taking care to sow it around the body of the tree, about 3 or 4 feet.

Plum and Cherry Trees, whose limbs may be infected with the black gum, should have them pruned off, and precaution should be taken to burn every limb thus cut off, as every excrescence is filled with insects, or their eggs; then let the bodies of the trees be painted with the same mixture as recommended for apple trees.

Sheep—If you wish to protect your sheep from worms in the head, now is the time to prepare the preventive means. It is simple, but no less effectual. Provide yourself with a trough, place it in your sheep pasture. Put into it, once a week, for each sheep, a gill of *tar* and a like quantity of *salt*, well mixed together. In licking out the salt, they will smear their noses, and thus secure themselves against the fly which deposits the eggs in their noses, which produce the disease called the *worm in the head*. This preventive means must be renewed for four or five weeks, weekly. Rigid attention to this admonition will protect your sheep; neglect of it, will, in all probability, be punished by disease being visited upon the greater part of your flock.

Composts—A little industry exerted, every spare moment, in the accumulation of leaves, mould, mud, weeds, and indeed, of every kind of refuse matter about your farm, or the roads leading to it, would enable you to form a compost heap, which, by the time needed, would be excellent manure. If you were to ask us what would make manure, we would tell you, *any thing that would rot or decompose*. A dead horse, covered with thirty cart loads of earth, of any kind, will convert the whole mass into manure by the time his flesh is decayed; over such a body, a bushel of plaster should be spread, to prevent the escape of the ammonia. A dead dog, or a dead hog, or a dead sheep, will make good manure of a ton of earth; then, why throw their carcasses away?

Tools and Implements—Have you a house for them? If not, get one, and have every thing in the shape of a tool, or implement, carefully overhauled, repaired, and placed under cover.

Briars, Thistles, Bushes, Sprouts, and Weeds—Wage an interminable war against the whole tribe of such incumbences.

Now then, as both you, as well as ourself, must be pretty well convinced, that we have been long enough about the affairs of the farm, suppose we take a stroll

IN THE GARDEN.

This is a spot that we are sure requires less of your attention than the *farm*, because it is here, where the good housewife reigns supreme, and as woman never neglects her duty, when her husband's interests are concerned, all that you can do, is, to enforce her orders, and see that your gardener and his assistants, if he have any, carry your lady's instructions into effect, to the very letter; for we are among those who place implicit reliance in the judgment of a wife, as from experience we do know, that ninety-nine times out of a hundred, it is right. So certain are we of this fact, that we advise every husband, never to do any thing of moment without consulting his better half; whatever advice she may give, he may rest assured, that it will be *disinterested* and *sincere*. God bless the sex, they are among the few perfect things on earth! But you must cry "*halt*," or we shall, like *Laertes*, be still "*harping on my daughter*," as we confess most freely, that admiration of woman as she ought to be, and mostly is, is our weak point. "*Halt*," did you say? Yes; then, we'll turn from woman, to

Cabbages—And by the by, these plants of yours look well. All you have to do

is, to keep the ground well stirred once in two weeks, and the stalks hilled up, and we can promise you a good bed of them. But then, this is not all you mean to put out? No. Then, my dear sir, you must bestir yourself, and set out your plants the first rain, or they will not have time to head. And while you are setting out plants, don't forget to have a bed of *Sauces*, as they are the vegetable marrows of the cabbage tribe.

Melons, Cantaloupes, &c.—Your melons look well, and say, as plain as vines can, that you have not contented yourself, after having planted the seed, to leave them to their fate. Continue the same attention to cleanliness, and to keeping the earth stirred, and by and bye, we'll do ourself the honor of trying their quality, —that is, if you are willing. Should the weather prove dry, recollect that *watering* is an antidote against drought.

Full Pickles.—If you desire to have good pickles for your wife and daughters, (and we know you do, for there never was a good man yet but he took pride in gratifying them,) we say then, if you desire to have good pickles, make your gardener distil a little elbow grease, in preparing a bed without delay. It is time they were planted.

Beans and Peas.—These may now be planted for late fall use, and as there is nothing like having a variety of vegetables on the table, let us advise you to get them in before you can say Jack Robinson, as when there is no time to lose, every day, nay hour, is precious.

Cauliflower plants for late fall use, may still be set out.

Celery.—This is a vegetable that no good husband should be without; besides being a most healthful one, it forms a handsome dish, gratifies the ladies' pride, and adds much to the appearance of the dinner table. If these be considerations sufficiently substantive to induce you to set out a bed, then all we have to say is, that it is now time to put in your plants. Deep rich loam suits Celery best: the exposure should be an open one, where it can be indulged with the enjoyment of sea and air, and draw upon the dews of Heaven, for copious supplies of their rich gases. If you have not grown it, it may be as well for us to tell you how to manage a bed.

After having selected your bed, spread over it manure, well rotted, three inches deep, spade this in a spade deep, rake fine, then lay off the bed in beds 4 feet wide, with alleys between 3 feet wide; dig these beds a spade deep, throw the earth upon the alleys, when this is done, then lay 4 or 5 inches in depth, of strong well rotted manure, all over the bottom of the beds thus dug out, dig and incorporate it with the loose earth, then cover with 2 inches in depth of earth from the alleys, plant your plants in rows a foot apart, the plants 8 inches asunder. Before inserting the plants, trim off the tops. After this, lay small pine or cedar bushes between the rows, (or straw will do,) to keep up moisture until the plants take a start. Water the plants every evening until they take root, or until a good soaking rain comes. Keep the plants clean from the beginning, until they are fit to be earthed up, which will be in a few weeks. When that time comes, we will remind you, as we are determined, if your lady and her amiable daughters do not have good Celery, the fault shall not be ours.

Radishes, Small Saladding, of all kinds, Lettuce, &c.—may, and should be, sown this month. As to Radishes, you should sow them weekly for a month to come.

Leeks, Shallots and Shires—should now be transplanted, and if you love good soup, and expect to enjoy it, provide plenty of these, as well as *thyme* and *parsley*, and you will not be disappointed; we can promise you that.

Fruit trees.—Examine such of your young trees as were budded or grafted last season, have all the shoots from the stocks rubbed off, as by remaining, they rob the grafts of the nourishment they ought to get. Did you say you had no fruit trees? Yes. Then take shame to yourself, for having your family so long out of a luxury so delightful and healthful; and plant some this fall. Play no longer truant to your duty.

Cherries, Plums, and Apricots—should be budded this month, and Pears inoculated. Operations of this kind are most successfully performed in cloudy weather.

Potatoes, Beets, Parsnips and Carrots.—Look to these roots, and see that no blades of grass, or envious weeds are permitted to raise their heads in their midst, as you may be assured that they delight not in communion with such pestilent loafers.

Tomatoes, Egg Plants, Horse Radish and Peppers.—Have a care to these, and "render unto Cesar the things that are Cesar's," for every living thing, whether it be a tame elephant of the Menagerie, or a vegetable of the garden, delights in the soft attentions which fill the stomach and sing a lullaby to the appetite.

Flowers.—These are pretty things at all times; but those belonging to you lady, are particularly so, and as they carry on their frontlets the impress of kind and indulgent treatment, we will not trespass on her province farther than whisper, that she should get you to see that the gardener plays no niggard's part with his watering pot, as a July sun extracts the moisture of the earth, with more than a spendthrift's prodigality, and its wants must be generously supplied. These *Dahlias* look well, and all full of promise, but if you wish to see them flower with more than their native perfection, you must see that your laundress, once a week, lets them drink copiously of soap suds, as the oil, the resin, and the potash, are therein delightfully commingled, as to form a nutriment which is, of all others, the best adapted to urge them onward to perfection, and ensure a *bloom* that will prove alike the wonder and admiration of the lovers of Flora.

With these brief hints we ask leave to make our best bow; but before we do so, by way of an *Anchor*, we'll request you to do us the favor to go into your garden three times a day, and see that what ought to be, is done.

Missouri Tobacco.—The Hannibal (Mo.) Journal say:—Four years ago it was a rare thing to see a hog-head of tobacco shipped from Hannibal—this year it is computed by a good judge that over seven hundred hog-heads will pass through this place for a market.

The following able paper, from Professor Jackson, is worthy of all attention. No man is better qualified by education, and by theoretical and practical knowledge, to speak than he is upon any thing connected with the improvement of the soil, as many years of his life have been incessantly devoted to *geology*, its kindred subject, and few men of the age have thrown more light upon either.

From the New England Farmer.

ACTION OF LIME ON THE SOIL AND CROPS.

Mr. Putnam.—Dear Sir—A friend lately called my attention to several articles which have been recently published in your paper, in which reference has been made to my reports, and my opinion was asked on the influence of lime as an amendment to acid soils. The fact of my not having seen those articles before, must be my apology to the writers for a seeming neglect of their questions.—A few remarks I will now offer you on the action of lime on the soil and the crops raised upon it.

- 1st. It acts on the mineral acids and salts in the soil.
- 2d. " " on the organic matters, both acids and their salts.
- 3d. " " on the atmosphere.
- 4th. " " on the plants.

Each one of the above divisions, considered in detail, would form a long chapter, and I shall not have time now to do more than glance at the most prominent points of practical and scientific interest.

When free acids, or acid salts, exist in the soil, lime by combining with the acid, renders the soil neutral; and when carbonate of lime is brought into action, in this manner, it gives out gradually its carbonic acid.

If a soil contains alum, (sulphate of alumina and potash) or copperas, (sulphate of the prot. oxide of iron,) or if it contains any decomposable sulphate, carbonate of lime will prove a most beneficial manure and amendment of that soil. For two valuable products result, viz: carbonic acid and sulphate of lime. So, also, if nitrate of ammonia exists in the soil, carbonate of lime will take the acid, and the ammonia will be liberated in its most favorable condition, that of a carbonate. Phosphoric acid also forms with lime one of the constant ingredients of all the cereal grains, grasses, and leguminous vegetables. This acid in its free state, is generally injurious to plants. It is found free in the smut of Indian corn, and it is produced in the soil by the decomposition of fish and of some animal manures, which contain it in excess, or combined with a volatile base. Phosphate of lime is an almost insoluble salt, but it appears nevertheless to be absorbed readily by living plants, as has been proved both by analysis and by synthesis; the latter experiment being well known from the action of burnt bones, which seem to possess nearly if not quite as strong an action on plants as bones containing their animal matter.

Many other mineral salts owe their fertilizing power to the fact of their containing lime as their basis; but the above examples are sufficient to illustrate the action of that substance on mineral salts and acids in soil.

A few words may now be devoted to the consideration of the action of lime on the organic matters of soils, which are known under the names of mould or humus.

These names may be regarded as generic, including a great many species of proximate elements and their salts. Their study in detail, would occupy too much room in your paper, had I the time to enter fully into the description of all the matters which have thus far been discovered in mould. It may suffice for the present, to state that mould exists in a great many different states. Sometimes it is nearly insoluble in water, or in the liquids usually formed by the decay of manures. At other times it is very soluble, both in water and in weak alkaline solutions, especially in the carbonate of ammonia. It is sometimes acid, but more frequently neutral, and when neutralized by certain matters, is almost if not wholly insoluble; while if combined with other matters, it is readily soluble in water. It is not always best to make it as soluble as possible, for there is danger (too often realized,) of its infiltrating into the subsoil with the rain water which washes it from the surface soil. By skilful management, a sufficiency is rendered soluble each year for the growth of the crop cultivated.

The following acids exist in the humus of all parts of the world:

Crenic acid,
Apocrenic acid,
Humic acid, and
Extract of humus.

Crenic acid forms two salts with lime, viz: a crenate and a sub-crenate. The former is most soluble in water, but the latter is not wholly insoluble. It is very readily dissolved by rain water, which contains a small quantity of carbonate of ammonia, and is also acted upon by all ammoniacal manures.

Apocrenic acid forms a dark brown salt with lime, which is still more insoluble in water than the crenate, but is likewise most readily decomposed by rain water and ammoniacal manures; giving up little by little its fertilizing acid in combination with another highly nitrogenized matter—ammonia.

Humic acid forms combinations with lime which are soluble in water and in ammoniacal solutions.

Extract of humus is also a compound body, and is neutral. It is highly charged with nitrogen, and is very soluble.

Crenic, apocrenic and humic acids all form insoluble compounds with the per-oxide of iron, and with manganese and with alumina. The yellow color of the subsoil is generally owing to the presence of the humate of the per-oxide of iron. The subsoil also contains a very large proportion of humate and crenate of lime, while the proportion of apocrenates of iron and of lime is much greater in the surface soil.

Now by the action of lime we may decompose these salts of iron, so as to bring out the combined acids in combination with lime, so as to render them available to plants. Thus even hog iron ore may be made to give up its fertilizing ingredients, (the apocrenic, crenic and humic acids.)

A soil may be free from any sour taste, and may not redden the chemist's blue test paper, but it may still be in an electro negative condition; and this condition I have supposed to favor the growth of acid plants of certain kinds. So far as I have observed, this appears to be the case with respect to the growth of field sorrel. I know that it will grow under other circumstances, but not so luxuriantly or abundantly. Exceptions are said to "prove the rule;" and the cases cited by your correspondent "D." may be of this class. Perhaps all the conditions of the problem have not been noticed, and thus we have contradictory testimony. I can cite many cases directly opposite to the one he has given. The experiments of Elias Phinney, Esq., of Lexington; Mr. Dyer, of Providence, and Mr. Levi Bartlett, of Warner, N. H., seem to have set the question of the favorable influence of limed composts at rest. Sorrel disappeared where it was used. It is not contended that lime alone is capable of conferring fertility upon a barren sandy plain, or that it will meet every possible case. It will, however, do much more than is generally known, when employed in a proper manner, by skilful hands. Its principal use with the farmer should be as a chemical agent in decomposing his composts, so as to render them fit for immediate use. I have advised the farmers generally in this primary region, so poor in calcareous matter, to mix into their composts of peat or swamp muck and barn-yard manure, which have stood one winter, a bushel of recently slacked lime to a wagon load of the compost, while digging it over in the spring, preparatory to spreading it on the soil. So far as I have heard, the result of this experiment has been universally favorable, and in all the cases where I have personally directed the operations, it has proved satisfactory. A much larger proportion of lime may be advantageously employed than what I have above mentioned, but even that small quantity produces a very good effect.

Top dressing with lime is liable to many objections, which do not present themselves when the lime is put into the compost, and thus at once neutralized. Top dressing with lime requires several years to make manifest its action, and it is not certain to act favorably, unless there is already a sufficiency of organic manures in the soil, for it to act upon.

So long as lime is attracting carbonic acid from the atmosphere, it must act unfavorably on growing plants, but when this ceases and the acids generated in the soil by the decay of vegetable matters begin to act on the carbonate of lime, then a very favorable influence is perceived, from the disengagement of carbonic acid gas, and the formation of the organic acid salts of lime.

Owing to this fact being overlooked, we have had much erroneous statistics on the use of lime as a manure, or amendment.

The action of lime on the atmosphere and on plants, is considered generally in the above remarks. Many other observations might be made on the same subject,

but the above will perhaps suffice for the present. Lime enters into the composition of many of the saline ingredients of vegetables, and constitutes the basis of their ashes when they are burnt. In the state of oxalate of lime, it enters into the composition of all hard wood forest trees, existing in distinct crystals in their cells, more than a million distinct crystals of that salt having been counted in a square inch of the birch and locust by Prof. Bailey.

Oxalic acid, which takes its name from the circumstance of its having been obtained from the *Oxalis acetosella*, or Wood sorrel, exists in the *Rumex* genus, or field and garden sorrels, and also in several other genera of plants. It is composed of carbon and oxygen, in the proportions of 33.75 carbon to 66.24 oxygen. It is possible for it to have been formed from the atmosphere and from water, but I am inclined to believe that it is more probably generated by the changes made in the organic acids which the plants absorb from the soil. The reasons for this opinion cannot be given here at length, since I should occupy too much of your paper. In the sorrel, oxalic acid is combined with potash, forming a bin-oxalate, or acid salt. In forest trees it is imprisoned in the cells, in the state of insoluble oxalate of lime.

But few experiments have been made to ascertain whether it exists in the soil. Indeed, some chemists deny the fact, but do not give us any experiments to prove it. We well know that it does occur in the soil, forming the mineral called Humboldtite, which consists of oxalic acid 46.14, and prot. oxide of iron 53.86. How extensively this salt exists in soils, is yet unknown, and it is also unknown how it would act on vegetation. It is probable that since it exists in all hard wood trees, that it may, by decay, form a manure, which would prove fertilizing to some species of plants.

The agricultural chemist knows full well that the moment organic matters enter the rootlets of plants, they begin to undergo transformations, which end in the assimilation of the convertible matter into the peculiar substances which compose the different parts of the stem, fruit and foliage.

Plants derive their nourishment from the air, from water, and from the soil—and any one who would limit them to but one of these sources of supply, provided by nature, is liable to commit grave errors in reasoning, which, however, he cannot very conveniently carry out in practice. Respectfully, your obt. serv't,

C. T. JACKSON.

Boston, May 30th, 1843.

P. S.—In your kind notice of my article on experiments with chemical salts, you requested the farmers to experiment on Indian corn. I hope they will do so, and communicate their results to you. They cannot fail to prove interesting.

Will you also invite them to apply a small quantity of each salt in solution, to a patch of grass land. I suppose it is not too late yet to make the experiment. Saline manures generally augment, in a very remarkable manner, the foliage of plants, and this is what we want in mowing lands.

C. T. J.

SCOTCH METHOD OF MAKING CHEESE.—A number of our subscribers have requested us to republish an article which appeared in the *Ploughman* on the 18th of June last, relating to a new mode of making cheese. We then requested our correspondents to try it and let us know how they liked it. Some months ago we published a letter from one of them, who was much pleased with the new mode, having successfully tried it. It may be very convenient for those who have small dairies.—*Mass. Ploughman*.

New Method of Making Cheese.—We have lately seen a method of making cheese, which is worthy of being tested by experiment at this season of the year, especially by those who have but a small quantity of milk. It is very simple, and easily tried. The milk is set in the ordinary every morning, and the curd separated from the whey as well as it can be with the hands. It is then pressed compactly into the bottom of the earthen pot, and covered over with several folds of dry linen, or cotton cloth. By this process the remaining whey is absorbed, and when the cloth becomes saturated it is removed and a dry one placed in its stead. In the course of the day and night this process removes the whey as thoroughly as can be done by pressing.—The next morning the milk is prepared in the same manner, and the curd is packed closely upon the top of that prepared the day previous, and the

same method pursued in separating the moisture. This process to be repeated till you have a cream pot full of cheese. It is thus seen to be a convenient method where the dairy woman has the milk of but one or two cows. If it work well, it is an important discovery. If it fail, it need not be a very disastrous failure. It is a very successful way of preserving cheese from flies and mice, as it can be perfectly enclosed and kept from the air and light. We have seen but one experiment of this kind, and this promises to be a successful one. The cheese appeared as free from moisture and as solid as that made by the press. The labor is much less, and the care of it afterwards is comparatively nothing.

BALTIMORE MARKET, June 27, 1843.

PROVISIONS—		Cattle—370	
Beef, Balt. mess, \$10 1/4	Butter, Glades, No. 1,	head of beef	offered
Do. do. No. 1, 9 1/4	Do. do. 2,	cattle offered	on Monday,
Do. prime, a	Do. do. 3, 6a	and 310 sold.	
Pork, mess, 12a	Do. Western, 2, a8	Extreme prices	paid 1.75
Do. No. 1, 11a	Do. do. 3, 6a	a\$3 per 100	lbs. on hoof,
Do. prime, 10a	Lard, Balt. kegs, 1, 6 1/2	as in quality,	equal to \$3.
Do. cargo,	Do. do. 2, none	50a5.75 net ;	principally at
Bacon, hams, Ba. lb. 8a	Do. Western, 1, 7a 1/2	intermediate	rates; about
Do. middlings, " 6 a	Do. do. 2,	60 head remain	over.
Do. shoulders, " 5 a	Do. do. bbls 1,	Live Hogs	are scarce—
Do. asst'd, West. 5 1/2 a 5 1/2	Cheese, casks, 6 1/2	sales at \$4.25	per 100 lbs.
Do. hams, 6a 7	Do. boxes, 6 1/2	Flour and	Grain are on
Do. middlings, 5 1/2 a	Do. extra, 10a 20	the Tide Wa-	ter canal.
Do. shoulders, 4 a 1/4			
COTTON—		Tobacco—	
Virginia, 6 a 7	Tennessee, lb.		
Upland, 6 a 7 1/2	Alabama, 6 1/2 a 8		
Louisiana, 7 a 8	Florida, 7 a 7 1/2		
North Carolina, 7 a	Mississippi, 7 1/2 a		
LUMBER—		Tobacco—	
Georgia Flooring, 12a 15	Joists & Sc'ling, W.P. 7a 10		
S. Carolina do, 9a 11	Joists & Sc'ling, Y.P. 7a 10		
White Pine, pann' 125a 27	Shingles, W. P. 2a 9		
Common, 20a 22	Shingles, ced'r, 3.00a 9.00		
Select Cullings, 14a 16	Laths, sawed, 1.25a 1.75		
Common do, 8a 10	Laths, split, 50a 1.00		
MOLASSES—		Tobacco—	
Havana, 1st qu. gl 16 1/2 a 18	New Orleans, 20 1/2 a 23		
Porto Rico, 21a 24	Guadaloupe & Mart 19a		
English Island, 21a 24	Sugar House, 28a 36		
TOBACCO—		Tobacco—	
Common, 2 1/2 a 3 1/2	Yellow, 7 a 9		
Brown and red, 4 a 5	Fine yellow, 7 1/2 a 10		
Ground leaf, 6 a 7	Virginia, 4 a 9		
Fine red, 6 1/2 a 8	Rappahannock, 3 a 7		
Wrappery, suitable for segars, 8a 13	Kentucky, 13 a 11		
Yellow and red, 7a 10	St. Domingo, 15 a 18		
Cuba, 15 a 18			
PLASTER PARIS—		Tobacco—	
Cargo, pr ton cash 2.87a	Ground per bbl. 1.00a		
WOOL—		Tobacco—	
WASHED.	UNWASHED.		
Saxony, 33a 35	Saxony and Merino 16a 18		
Full Merino, 30a 33	Common, to 1/2 blood, 14a 17		
3-4 blood do, 27a 30	Pulled, 14a 17		
1-2 do do, 24a 27			
1-4 and common, 18a 20			
Tub washed, 18a 20			
SUGARS—		Tobacco—	
Hav. wh. 100lbs 7.50a 9.00	St. Croix, 100lbs 5.00a 7.00		
Do. brown, 6.25a 7.00	Brazil, white, 7.00a 8.00		
Porto Rico, 5.00a 7.50	Do. brown, 4.50a 6.25		
New Orleans, 4.50a 6.25	Lump, lb. c.		
COFFEE—		Tobacco—	
Havana, 7 a 8	Java, lb. 10 a 13		
P. Rico & Laguay, 7 1/2 a 8	Rio, 7 1/2 a 8		
St. Domingo, 6 a 6 1/2	Triage, 5 a 7		
SOAP—		Tobacco—	
Baltimore white, 12a 14	North'n, br'n & yel. 3 1/2 a 4 1/2		
" brown & yell'w 4 1/2 a 5 1/2			
CANDLES—		Tobacco—	
Mould, common, 9a 10	Sperm, 24a 25		
Do. choice brands, 10 1/2	Wax, 60a 65		
Dipped, 8a 9			
FEATHERS—		Tobacco—	
Malaga bunch, box, 1 60a 1 65			
FLOUR—		Tobacco—	
We quote			
Superfine How. st., from stores, bl. \$5.50 a 5 75			
Do. City Mills, 5.75 a			
Do. Susquehanna, 5.75 a 6			
Rye, first, 3.12a 3.25			
Corn Meal, kiln dried, per bbl. 2.37 a 2 62			
Do. per hhd. \$12 a 12.25			
GRAIN—		Tobacco—	
Wheat, white, p bu. 122	Peas, black eye, 112		
" best Pa. red 119a 122	Clover seed, store 3.50a 3.75		
" ord. to pri. Md 90a 116	Timothy do 1.87a 2.25		
Corn, white, 55a	Flaxseed, rough st. p. 1.25		
" yellow Md. 54a	Chop'd Rye, 100 lbs. 1.25		
Rye, Pa. 63a	Ship Stuf, bus. 20a 22		
Oats, Md. 26a 27	Brown Stuf, 14a 15		
Beans, 112a	Shorts, bushel, 10a		

BERKSHIRE PIGS.

The subscriber offers for sale Berkshire Pigs, 2 to 4 months old, from the piggy of Messrs. Gorsuch, and others of the best breeders in Maryland, at \$12 1/2 deliverable in this city, or \$15 caged with feed for any port on the coast of the U.S. m 29 S. SANDS

PATENT MANURE.

The undersigned, manufacturers of manure, by what has been called the "Bommer process" respectfully announce that they have taken Mr. Thos. M. Abbet into partnership, and will in future conduct their business under the firm of Abbet & Co.

CHARLES BAER, JOHN GOULIART.

Baltimore, June 26, 1843. ABSETT & Co. having united their discoveries and improvements with those of Mr. George Bommer of New York, respectfully inform the public that they will continue the use of their method in the states South and West of Pennsylvania and Ohio.

With the view of graduating the cost, to the quantity of land upon which it may be desired to use the method, the following scale of prices has been adopted, viz:

For Gardens of any extent	\$6 00
Farms under 100 acres	10 00
Farms from 100 to 200 acres	15 00
do from 200 to 400 acres	20 00
do over 400 acres	25 00

By the remittance of the sum here specified, a copy of the method will be sent by mail or in any other mode proposed by the purchaser.

No one need have fears of failure as we have known of no instance of the kind, where our instructions have been followed.

Heaps of manure consisting of straw, hay, corn stalks, shucks, cobs, leaves and other ligneous plants have been constructed in the neighborhoods of Albany, New-York, Philadelphia, Baltimore and Washington, which have been converted into a rich fertilizing and nutritious manure, in some cases in the short space of 15 days, while in others, owing to the difference of the material and the season, (the bitter and cold weather of last winter) it has taken nearer 60 days. The average we consider to be about 28 days, and cost about \$4 for a thousand cart loads.

Mr. Baer will be in Richmond in the second week of July, for the purpose of waiting upon our patrons there, and giving such personal instructions as they may desire. The citizens of Va. wishing individual rights are referred to Mr. C. T. Botts, editor of the *Southern Planter*, who is our principal agent for that State. All letters of inquiry must be post paid.

Applicants for the patent right for either states or counties will please address themselves to

ABSETT & CO., Baltimore,

Or to Thos. M. Abbet in Hollins st. above Cove.

NOTICE.—The patent right for the New England States, New York, New Jersey, Delaware and Pennsylvania is held by Mr. Geo. Bommer, New York.

Baltimore, June 28, 1843.

HUSSEY'S REAPING MACHINE.

Farmers are respectfully requested to send their orders as soon as they shall have decided on procuring machines to cut the next year's crop: by doing so, they will enable the subscriber to make preparations early in year with confidence, so that none may be disappointed at harvest time, as has been the case for several years past by delaying to apply for them in season. His former practice will be steadily adhered to of making no more machines than are ordered, lest a failure of the next years crop should leave a large number on his hands, unsold, which his circumstances will not allow. It is hoped that the great success which has attended the machines made for the last harvest will remove every doubt of their great value. Several persons have cut as high as 20 acres in a day with the last improved machines, while one gentleman with one of the old machines cut his entire crop of 72 acres in less than five days, without having a cradle in the field.

The greatest objection ever made to the machine was its heavy bearing on the shaft horse; this has been entirely removed by adding a pair of forward wheels to support the front of the machine, and a driver's seat at an extra expense of 20 dollars.

CORN & COB CRUSHER

The subscriber's Corn & Cob crusher which obtained the first premium over several competitors at the late Fair of the N. York State Agricultural Society held at Albany, N. Y. and is so highly recommended in the public prints, by farmers who have used them, will be kept constantly on hand for sale.

no 9

OBED HUSSEY

LIME—LIME.

The subscriber is prepared to furnish any quantity of Oyster Shell or Stone Lime of a very superior quality at short notice at their Kilns at Spring Garden, near the foot of Eutaw street Baltimore, and upon as good terms as can be had at any other establishment in the State.

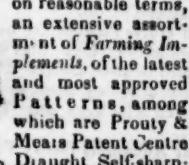
He invites the attention of farmers and those interested in the use of the article, and would be pleased to communicate any information either verbally by or letter. The Kilns being situated immediately upon the water, vessels can be loaded very expeditiously. N.B. Wood received in payment at market price.

ap. 22 3m

E. J. COOPER.

D. O. PROUTY,

Manufacturer of Agricultural Implements, No. 176 Market street, Philadelphia, above 5th, south side, has constantly for sale



on reasonable terms, an extensive assortment of Farming Implements, of the latest and most approved Patterns, among which are Prouty & Meats Patent Centre Draught Self-sharp-

ening Ploughs, Subsoil and Side Hill Ploughs, Cultivators—Corn Shellers—Hay and Straw Cutters—Grain Fans—Corn Pigsties—Harrows, Cheese Presses—Apple Parers—Churns—Grain Cradles—Corn Crushers—Dirt Scrapers—Hoes, Shovels, Spades, &c. Books on Agriculture, Horticulture and Rural Affairs also Garden, Grass and Flour Seeds for sale at wholesale and retail, very low for cash by

may 17 1m

176 Market st., Philadelphia.

DURHAM BULL AND BERKSHIRE BOAR.

FOR SALE.—A two years old Durham Bull of beautiful figure and fashionable blood, being out of a very high bred herd book cow and got by BEMENT's celebrated Bull Astoria. An animal of finer form or temper cannot be found. He will be sold at the extremely low price of \$150.

Also, a two years old Berkshire Boar, a fine animal, selected from the piggery of C. N. Bement—Price \$15.
Also, a young Berkshire SOW, a year old, with 5 pigs by the above boar. 4 weeks old—Price \$15.

Apply at the office of the American Farmer.

June 14



MARTINEAU'S IRON HORSE-POWER IMPROVED
Made less liable to get out of order, and cheaper to repair, and at less cost than any other machine.

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kinds of ploughs, constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment.
R. B. CHENOWETH,
corner of Front & Ploughman sts. near Baltimore st. Bridge, or No 29 Pratt street.

HARVEST TOOLS.

JONA. S. EASTMAN, Pratt street, has in store, Wolf's superior Pennsylvania made Grain Cradles, Grain and Grass Scythes, warranted superior quality.—Also, steel and wood Hay Forks; Hay Rakes, of different qualities; Grass Seeds; Weeding Hoes, Spades and Shovels, Chopping Axes, &c. &c.

Likewise Thrashing Machines and Horse Powers, for two or four horses, equal to any machines of the kind in use. Also, on hand, a large supply of his superior patent Cylindrical Straw Cutters, at reduced prices, both for the wood and iron frames; Corn Shellers, Corn and Tobacco Cultivator, plain and expanding, and of superior quality. His stock of PLOUGHS on hand is extensive, embracing a great variety of all sizes, with cast and wrought iron shares, including his newly invented patent and premium PLOUGH, with iron beam, and self sharpening point, greatly simplified. His stock of Plough Castings, on hand is also large, and of superior quality, superior as he believes to any ever before made in this State. He has patterns that are highly approved for Horsepowers and Thrashing Machines, from which he will furnish castings on reasonable terms, to those that wish to manufacture those Machines.

The above named articles will be sold at wholesale and retail for cash, or approved city acceptances, at prices to suit the exigencies of the times.

In store, Landreth's superior Garden SEEDS, of last year's growth.

HARVEST TOOLS, THRASHING MACHINES, &c.
ROBERT SINCLAIR, Jr. & CO. No 60 Light st. Baltimore.

Offer for sale at reduced prices,

Grain and Grass Scythes	Wheat Fans, several most approved sizes and patterns
Grass Scythes with hangings complete	Scythe Stones, Rides, Scythe Nibs and Rings
Grain Cradles, wood braced	Cradlers' Hammers
do iron braced	
Sickles, German and American	

ALSO,

HORSE POWERS for two or more horses

THRASHING MACHINES, made on the spike principle, very strong and durable

Straw Carriers to attach to do.

Those Thrashers and Horse Powers are now so generally used and approved of by farmers in Maryland, that it is scarcely necessary to say any thing in regard to their merits. Those however, who have not had an opportunity of seeing them in operation are referred to the following gentlemen who have our Thrashers and Powers in use, viz.

Col. Jno. Mercer, near Annapolis	Henry Fite, Baltimore Co.
Col. Boyle, do	Dr. A. Tyson do
B. D. Hall, do	Moses Potter do
Mr. Hopkins, do	Jas Rittenhouse do
Wm. F. Rennoe and R. B. Posey, St. Mary's co.	

About 350 more names can be given if required from gentlemen in different parts of this and other states, many of whom have been using our machines since 1858.

may 31

R. S. jr. & Co.
if

A MARKET GARDENER WANTED.

One who can come well recommended, (and none other need apply) will find a good situation on application to **S. SANDS**, at the office of the American Farmer.

OXEN—Two pair well broken, wanted—Apply as above.

MINGO CHIEF,

Will make his second season in Maryland, and be let to Mares at the Farm of Mr. J. P. E. STANLEY, 4 miles from Baltimore, on the Frederick road, at Eight Dollars for each mare.



MINGO CHIEF is 6 years old this spring, near 15 hands high, of a rich brown color, perfectly formed for speed and action, goes all gaits naturally, and is very fast under the saddle.

Mingo Chief was got by an Indian horse well known at Montreal as "La Belle Poney", (grand sire of the famous trotting horse Bepo, and many other celebrated trotters and rackers;) that in his prime has racked his mile in 2:30, and altho' upwards of 20 years old, is still kept for mares in Canada.

The dam of Mingo Chief was pure Canadian, and could trot a mile in 3 minutes without training. Mingo Chief was selected during the summer of 1841, in the neighborhood of Montreal (by a gentleman experienced in these matters,) as being the best horse he could find to cross upon the stock of this part of the country for the production of saddle horses. The celebrated Morgan breed of Vermont is said to be of the same cross.

Season commenced 1st April and ends 1st July.

ap 26 E. WEEKS, Manager.

AGRICULTURAL MACHINERY & IMPLEMENTS.

The subscriber begs leave to assure the public that he is prepared to execute orders for any of his agricultural or other machinery or implements with promptness. His machinery is so well known that it is unnecessary to describe the various kinds, but merely annex names and prices:

Portable Saw Mill with 12 ft. carriage, and 24 ft. ways and 4 ft. saw,	\$300
Extra saws for shingles, with 3 pair of head blocks,	125
Post Morticing Auger,	15
Bands,	10
Horse Power of great strength,	200
Corn and Cob Crusher, wt. 600 lb.	65
Thrashing Machine, wt. 300 lb.	75
Corn Planter, wt. 100 lb.	25
Thrashing Machine, wt. 600 lb.	150
Grist Mill, 2 1/2 ft. cogstone stones,	150
Do. 3 ft. do.	175
Belts for the same,	15
Post Auger, wt. 15 lbs.	5
Tobacco Press complete, portable,	85
Portable Steam Engine, with portable Saw Mill and cutting oil Saw,	3500
Large Sawing and Planing Machine with cutting off saw, or cross cutting for arge establishments,	1100
If made of iron,	3000
Large Boring and Morticing machine for large establishments	150
Tenoning Machine	200
Vertical Saw	125
Small Morticing Machine, suitable for carpenters,	25

All of which articles are made in the most superior style of workmanship, of the best materials, and warranted to answer the purposes for which they are intended. It cannot be expected that the subscriber can speak of the merits of the above enumerated articles within the compass of an advertisement. Suffice it to say, that each have found numerous purchasers, and proved entirely satisfactory. The Portable Saw Mill with a 10-horse power engine, can cut, with perfect ease, 10,000 feet of lumber a day, and, if necessary, could greatly exceed that quantity.

GEORGE PAGE,

West Baltimore street, Baltimore, Md.

Pamphlets containing cuts with descriptions of the above named machines, can be had on application (if by letter post paid) to the subscriber, or to Mr. S. Sands, at the office of the American Farmer.

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WOOL, WOOL, WOOL.

The subscribers respectfully inform the farmers of Maryland, that they are now manufacturing

Best twill'd Kersey, 3-4 wide, 33 1-3c. pr yd. 12 to 16 oz. clean wool is required

Striped linsey for women, 1 1-4 do. 33 1-3 do. 8 to 10 do do do	
Unfull'd kersey for men, 1 1-4 do. 28c. do. 12 oz. do do do	
Coarse Cloth, all wool, 3-4 do. 41c do. 1 1-4 lb. do do do	
Carpeting, a new and elegant style, 62 1-2c. do. 1 1-8 lb. do do do	

When the yarn is sent doubled and twisted, 44c.

Fine Cloth for gentlemen's wear, 3-4, 75c. 1 lb.

Blankets, all wool, 1 1-8 yd. wide, 37 1-2c. pr yd. 1 to 1 1-4 do do

Customers will send their wool to their agent in Baltimore, and write to us respecting it, care of Wells Chase, No 5 South Eutaw street, Baltimore. Refer to Messrs. Neal & Luckett, and Batten & Lowe, Baltimore; Col. Edw. Lloyd E S; Jas. Kent, esq. A. A. co.

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JAMES MITCHELL & CO.

of the firm of Owings & Mitchell

FOR SALE.

A handsome thorough bred **DURHAM BULL**, about 6 or 7 months old, from very superior stock. Price \$65, deliverable in Baltimore—Apply to

SAM. SANDS.

TO FARMERS.

The subscriber has for sale at his Plaster and Bone Mill on Hughes street, south side of the Basin, **GROUND PLASTER, GROUND BONES, OYSTER SHELL & STONE LIME**, and **LEACHED ASHES**, all of the best quality for agricultural purposes, and at prices to suit the times.

Vessels loading at his wharf with any of the above articles, will not be subject to charges for dockage or wharfage.

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WM. TREGO, Baltimore.

**PEACH AND PEAR TREES.**

The subscriber is prepared to supply Peach Trees of the choicest kinds, surpassed by none in the U. States, and of the earliest to the latest kinds, which he is enabled to sell at the very low rate of 12 1/2 cents per tree, if packed an extra charge.

He can also supply a few very choice Pear Trees at 50 cts. per tree—and in the Fall will be able to furnish any quantity required of many kinds.

Catalogues furnished on application at the Farmer office. Entire reliance may be placed on the genuineness of these trees, and of their being of the choicest kinds.

ap 12 S. SANDS.

LIME FOR AGRICULTURAL PURPOSES.

Having accumulated a large stock of first quality Oyster Shell Lime, at my kilns on the Potomac River, I beg leave to say to the Farmers and Planters generally, and more especially to those who are anxious to improve their lands, and have been deterred from doing so by the scarcity of money and low prices of their produce, that I will sell them lime delivered on board of vessels at the kilns, either at Lancaster's Tide Mill, near the mouth of the Wicomico River; Lower Cedar Point, or Pickewaxin Creek, at 6 1/2 Cents per bushel, payable March 1st, 1844, (if ordered, deliverable between this date and 1st of August next,) or I will deliver it on the above terms, charging in addition the customary freight, which must in all cases be cash. Orders addressed to me, at Milton Hill Post Office, Charles County, Md., will receive prompt attention from

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WM. M. DOWNING.

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BARNABY & MOOERS' PATENT SIDE-HILL & LEVEL LAND PLOUGH.

To which was been awarded the following and Several other Premiums, viz.—By the American Institute, at their Ploughing Match at Newark, N. J. 1842, the First Premium, a Silver Cup—and at their Annual Ploughing-Match for 1841, at Sing Sing, N.Y., a Gold Medal for the best work done, lightest draught, and best principle of construction.—answering for "general purposes" The N. York State Agricultural Society, awarded it an Extra Premium of \$50, at their Annual Ploughing Match at Syracuse for 1841.

The following are its advantages over the Common Plough, viz.—1st. Ease of Draught—2d. Perfection of Work—3d. Strength and Durability—4th. All Dead Furrows may be prevented, as the Furrows can all be turned one way—5th. Any width of Furrows may be turned, between 8 1/2 inches, by moving the catches in the cross-piece towards the handles for a wide Furrow,—and towards the centre for a narrow one—6th. Placing the beam in the centre of the cross-piece, makes it a "Double Mould-Board Plough," turning a Furrow both ways at the same time,—answering for Green-Ridging, Ploughing between Corn and Potatoes, or any any crop cultivated in rows or drills,—and for Digging Potatoes.

The subscribers having purchased the Right to Manufacture the above celebrated Ploughs, for the State of Maryland, are now prepared to furnish Farmers with the same,—and they pledge themselves to the Public, to manufacture this Plough in the Very Best Manner, both as to materials and workmanship. All Orders will be thankfully received and punctually attended to.

Price as Follows, (adding Transportation.)—No. 2, 45lb. at \$7. No. 3, wt. 70 lbs. \$10.—No. 4, 80 lbs. \$11.—No. 5, 90 lbs. \$12. Extra edge, 50 Cents. For Cutter, if added, laid with steel, \$1.50. Wheel, \$1.50. Shin Pieces, 12 Cents.

DEN VEDS & DANIEDS, corner Monument and North-sts. who having purchased Mott & Co's interest, are now sole owners. **B. H. WILSON**, No. 52, Calvert st. 1 door below Lombard, is Agent for the sale of the above Plough. Baltimore, Nov 23, 1842

BENTLEY'S AGRICULTURAL STEAM GENERATOR

MANUFACTURED BY BENTLEY, RANDALL & Co.,

Manufacturers of Bentley's Convolute Steam Boilers, Baltimore, Md. for steaming Corn Stalks, Hay, Potatoes, Boiling water, &c. It is also highly recommended to Tanners for steaming Leaches, also for various manufacturing and mechanical purposes, where steam or large quantities of hot water is required. This article is made wholly of iron, and was got up expressly to meet the wants of the Agricultural community, and it is confidently believed that for simplicity, durability, economy in money, fuel, time, and room combined its equal has not been offered to the public. It possesses all the principles of the most approved Tubular Locomotive Boilers, for saving of fuel, while the construction is such that one of equal size, strength and durability that has heretofore cost \$100, or more, is now offered at \$45. It is operated equally well with Anthracite coal as with wood, and can be removed by two persons at pleasure.—Prices No. 1 \$45, considered of capacity enough for ordinary Farm purposes; No. 2 \$60, No. 3 \$75.

BENTLEY, RANDALL & Co.

McCausland's Brewery, Holliday, st. near Pleasant. We have the liberty of referring to the following gentlemen, viz:—David Barnum, Esq. City Hotel; Captain Jackson, warden of the Maryland Penitentiary, and Doct. Robt Dorsey of Edw., where they can be seen in operation.

Agents, J. F. Callan, Esq. Washington City; Capt. John Brooks, Upper Marlboro', Prince Georges' Co. Md. where samples can be seen. For numerous testimonials in favor of the above call on the manufacturers or their agents.

N. B. R. & Co., are also agents for Murray's Corn and Cob Crushers.

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Balto. Md., Dec. 1842.